

CLAIMS:

1. An image recording apparatus including receiving means for converting a received signal into an image signal which can be recorded and outputting the image signal and recording means for recording the image signal supplied from said receiving means, wherein

said receiving means comprises an information output circuit for outputting states of said receiving means itself and said recording means as information, and

said receiving means obtains the state of said recording means,

said receiving means outputting information of said recording means in the form substantially identical with a form used to output the state of said receiving means itself as the information by using said information output circuit.

2. An image recording apparatus including receiving means for converting a received signal into an image signal which can be recorded and outputting the image signal and recording means for recording the image signal supplied from said receiving means, wherein

said receiving means comprises an information output circuit for outputting states of said receiving means itself and said recording means as information, and

an input circuit for setting the information outputted by said information output circuit, and

said receiving means obtains the state of said recording means,

said receiving means outputting the state of said recording means in the form substantially identical with a form used to output the state of said receiving means itself by using said information output circuit and setting the state of said recording means in the form substantially identical with a form used to set the state of said receiving means itself to output set contents thereof to said recording means.

3. An image reproducing apparatus including receiving means for converting a received signal into an image signal in a specific form and outputting the image signal, and reproduction means for reproducing an image signal having the same form as the image signal produced by said receiving means, wherein

said receiving means comprises an information output circuit for outputting states of said receiving means itself and said reproduction means as information, and

said receiving means obtains states of said reproduction means and other receiving means,

said receiving means outputting information of said reproduction means in the form substantially identical with a form used to output the state of said receiving means itself as information by using said information output circuit.

4. An image reproducing apparatus including receiving means for converting a received signal into an image signal in a specific form and outputting the image

signal, and reproduction means for reproducing an image signal having the same form as the image signal produced by said receiving means, wherein

said receiving means comprises an information output circuit for outputting states of said receiving means itself and said reproduction means as information, and an input circuit for setting information produced by said information output circuit, and

said receiving means obtains states of said reproduction means and other receiving means,

said receiving means outputting the state of said reproduction means in the form substantially identical with a form used to output the state of said receiving means itself by using said information output circuit and setting the state of said reproduction means in the form substantially identical with a form used to set the state of said receiving means itself to output set contents thereof to said reproduction means.

5. An image recording apparatus including receiving means for converting a received signal into an image signal which can be recorded and outputting the image signal and recording means for recording the image signal supplied from said receiving means, wherein

said recording means comprises an information output circuit for outputting states of said recording means itself and said receiving means as information, and

said recording means obtains the state of said receiving means,

said recording means outputting information of said receiving means in the form substantially identical with a form used to output the state of said recording means itself as the information by using said information output circuit.

6. An image recording apparatus including receiving means for converting a received signal into an image signal which can be recorded and outputting the image signal and recording means for recording the image signal supplied from said receiving means, wherein

said recording means comprises an information output circuit for outputting states of said recording means itself and said receiving means as information, and an input circuit for setting the information outputted by said information output circuit, and

said recording means obtains the state of said receiving means,

said recording means outputting the state of said receiving means in the form substantially identical with a form used to output the state of said recording means itself by using said information output circuit and setting the state of said receiving means in the form substantially identical with a form used to set the state of said recording means itself to notify set contents thereof to said receiving means.

7. An image reproducing apparatus including receiving means for converting a received signal into an image signal in a specific form and outputting the image

signal, and reproduction means for reproducing an image signal having the same form as the image signal produced by said receiving means, wherein

said reproduction means comprises an information output circuit for outputting states of said reproduction means itself and said receiving means as information, and

said reproduction means obtains a state of said receiving means,

said reproduction means outputting information of said receiving means in the form substantially identical with a form used to output the state of said reproduction means itself as information by using said information output circuit.

8. An image reproducing apparatus including receiving means for converting a received signal into an image signal in a specific form and outputting the image signal, and reproduction means for reproducing an image signal having the same form as the image signal produced by said receiving means, wherein

said reproduction means comprises an information output circuit for outputting states of said reproduction means itself and said receiving means as information, and an input circuit for setting information produced by said information output circuit, and

said reproduction means obtains the state of said receiving means,

said reproduction means outputting the state of

said receiving means in the form substantially identical with a form used to output the state of said reproduction means itself by using said information output circuit and setting the state of said receiving means in the form substantially identical with a form used to set the state of said reproduction means itself to output set contents thereof to said receiving means.

9. An image recording apparatus including a plurality of receiving means for converting received signals into image signals which can be recorded and outputting the image signals, and recording means for selecting one of the image signals supplied from said plurality of receiving means and recording it, wherein at least one of said receiving means comprises an information output circuit for outputting states of said at least one of receiving means itself, said recording means and other receiving means as information, and

said at least one of receiving means obtains states of said recording means and said other receiving means,

said at least one of receiving means outputting information of said recording means and said other receiving means in the form substantially identical with a form used to output the state of said at least one of receiving means itself as information by using said information output circuit.

10. An image recording apparatus including a

plurality of receiving means for converting received signals into image signals which can be recorded and outputting the image signals, and recording means for selecting one of the image signals supplied from said plurality of receiving means and recording it, wherein

at least one of said receiving means comprises an information output circuit for outputting states of said at least one of receiving means itself, said recording means and other receiving means as information, and an input circuit for setting information outputted by said information output circuit, and

said at least one of receiving means obtains states of said recording means and said other receiving means,

said at least one of receiving means outputting the state of said recording means and said other receiving means in the form substantially identical with a form used to output the state of said at least one of receiving means itself by using said information output circuit and setting the states of said recording means and said other receiving means in the form substantially identical with a form used to set the state of the at least one of receiving means itself to output set contents thereof to said recording means and said other receiving means.

11. An image reproducing apparatus including a plurality of receiving means for converting received signals into image signals in a specific form and

outputting the image signals, and reproduction means for reproducing an image signal having the same form as the image signal produced by said receiving means, wherein

at least one of said receiving means comprises an information output circuit for outputting states of said at least one of receiving means itself, said reproduction means and said other receiving means as information, and

said at least one of receiving means obtains states of said reproduction means and said other receiving means,

said at least one of receiving means outputting information of said reproduction means and said other receiving means in the form substantially identical with a form used to output the state of said at least one of receiving means itself as information by using said information output circuit.

12. An image reproducing apparatus including a plurality of receiving means for converting received signals into image signals in a specific form and outputting the image signals, and reproduction means for reproducing an image signal having the same form as the image signal produced by said receiving means, wherein

at least one of said receiving means comprises an information output circuit for outputting states of said at least one of receiving means itself, said reproduction means and said other receiving means as information, and an input circuit for setting information

produced by said information output circuit, and

said at least one of receiving means obtains states of said reproduction means and said other receiving means,

said at least one of receiving means outputting states of said reproduction means and said other receiving means in the form substantially identical with a form used to output the state of said at least one of receiving means itself by using said information output circuit and setting states of said reproduction means and said other receiving means in the form substantially identical with a form used to set the state of said at least one of receiving means itself to output set contents thereof to said reproduction means and said other receiving means.

13. An image recording apparatus including a plurality of receiving means for converting received signals into image signals which can be recorded and outputting the image signals, and recording means for selecting one of the image signals supplied from said plurality of receiving means and recording it, wherein

said recording means comprises an information output circuit for outputting states of said recording means itself and said receiving means as information, and

said recording means obtains states of at least one or more of said receiving means,

said recording means outputting information of said at least one or more recording means in the form

substantially identical with a form used to output the state of said recording means itself as information by using said information output circuit.

14. An image recording apparatus including a plurality of receiving means for converting received signals into image signals which can be recorded and outputting the image signals, and recording means for selecting one of the image signals supplied from said plurality of receiving means and recording it, wherein
said recording means comprises an information output circuit for outputting states of said recording means itself and said receiving means as information, and an input circuit for setting information produced by said information output circuit, and

said recording means obtains states of at least one or more of said receiving means,

said recording means outputting the states of said at least one or more recording means in the form substantially identical with a form used to output the state of said recording means itself by using said information output circuit and setting the states of said at least one or more receiving means in the form substantially identical with a form used to set the state of said recording means itself to notify set contents thereof to said at least one or more receiving means.

15. An image reproducing apparatus including a plurality of receiving means for converting received signals into image signals in a specific form and

outputting the image signals, and reproduction means for reproducing an image signal having the same form as the image signals produced by said receiving means, wherein

said reproduction means comprises an information output circuit for outputting states of said reproduction means itself and said receiving means as information, and

said reproduction means obtains a state of at least one of said receiving means,

said reproduction means outputting information of said at least one of receiving means in the form substantially identical with a form used to output the state of said reproduction means itself as information by using said information output circuit.

16. An image reproducing apparatus including a plurality of receiving means for converting received signals into image signals in a specific form and outputting the image signals, and reproduction means for reproducing an image signal having the same form as the image signals produced by said receiving means, wherein

said reproduction means comprises an information output circuit for outputting states of said reproduction means itself and said receiving means as information, and an input circuit for setting information produced by said information output circuit, and

said reproduction means obtains a state of at least one of said receiving means,

said reproduction means outputting information

of said at least one of receiving means in the form substantially identical with a form used to output the state of said reproduction means itself by using said information output circuit and setting the state of said at least one of receiving means in the form substantially identical with a form used to set the state of said reproduction means itself to notify set contents thereof to said at least one of receiving means.

17. An image recording and reproducing apparatus according to Claim 1, wherein said receiving means for outputting information by means of said information output circuit receives a digital broadcast signal and outputs said image signal.

18. An image recording and reproducing apparatus according to Claim 3, wherein said receiving means for outputting information by means of said information output circuit receives a digital broadcast signal and outputs said image signal.

19. An image recording and reproducing apparatus according to Claim 5, wherein at least one of said receiving means receives a digital broadcast signal and outputs said image signal.

20. An image recording apparatus according to Claim 1, wherein said information output circuit is supplied with an image signal and superimposes or overwrites an image signal for displaying information on said supplied image signal to be outputted, so that the information is outputted.

21. An image recording apparatus according to Claim 3, wherein said information output circuit is supplied with an image signal and superimposes or overwrites an image signal for displaying information on said supplied image signal to be outputted, so that the information is outputted.

22. An image reproducing apparatus according to Claim 5, wherein said information output circuit is supplied with an image signal and superimposes or overwrites an image signal for displaying information on said supplied image signal to be outputted, so that the information is outputted.

23. An image reproducing apparatus according to Claim 1, wherein said receiving means for outputting information by means of said information output circuit comprises

a digital broadcast receiving circuit for demodulating a digital broadcast signal and outputting a compressed digital image signal,

an expander circuit for expanding said compressed digital image signal to output a digital image signal, and

a digital-to-analog conversion circuit for converting said digital image signal into an analog image signal, and

said information output circuit is supplied with said digital image signal and superimposes or overwrites a digital image signal for displaying

information on said supplied digital image signal to be outputted, so that the information is outputted.

24. An image reproducing apparatus according to Claim 3, wherein said receiving means for outputting information by means of said information output circuit comprises

a digital broadcast receiving circuit for demodulating a digital broadcast signal and outputting a compressed digital image signal,

an expander circuit for expanding said compressed digital image signal to output a digital image signal, and

a digital-to-analog conversion circuit for converting said digital image signal into an analog image signal, and

said information output circuit is supplied with said digital image signal and superimposes or overwrites a digital image signal for displaying information on said supplied digital image signal to be outputted, so that the information is outputted.

25. An image recording apparatus according to Claim 9, wherein said information output circuit included in said receiving means for outputting information comprises a circuit supplied with an image signal for superimposing or overwriting an image signal for displaying information on said supplied image signal to be outputted, so that the information is outputted, and

said receiving means for outputting said

information outputs at least a first image signal on which information is superimposed or overwritten by said information output circuit,

said recording means including

a first change-over circuit for selecting one of a plurality of image signals to output a second image signal, and

a recording circuit for recording a supplied image signal,

said recording means supplying at least said first image signal to said first change-over circuit,

said recording means supplying said second image signal to said recording circuit,

said recording means outputting said second image signal,

said first change-over circuit selecting said second image signal to be outputted when said image output circuit is displaying the information.

26. An image recording apparatus according to Claim 22, wherein when said recording circuit is in a recording state, said information output circuit does not display information.

27. An image recording apparatus according to Claim 9, wherein said information output circuit included in said receiving means for outputting information comprises a circuit supplied with an image signal for superimposing or overwriting an image signal for displaying information on said supplied image signal to be outputted, so that

the information is outputted, and

said receiving means for outputting said information outputs at least a first image signal on which information is superimposed or overwritten by said information output circuit,

said recording means including

a first change-over circuit for selecting one of a plurality of image signals to output a second image signal,

a second change-over circuit for selecting one of two image signals to output a third image signal, and

a recording circuit for recording a supplied image signal,

said recording means supplying at least said first image signal to said first change-over circuit,

said recording means supplying said second image signal to said recording circuit,

said recording means supplying said first and second image signals to said second change-over circuit,

said recording means outputting said third image signal,

said second change-over circuit selecting said first image signal to be outputted when said image output circuit is displaying the information.

28. An image recording apparatus according to Claim 27, wherein when said recording circuit is in a recording state and said first change-over circuit selects said first image signal, said information output circuit does

not display information, and

said information output circuit included in said receiving means for outputting information comprises a circuit supplied with an image signal for superimposing or overwriting an image signal for displaying information on said supplied image signal to be outputted, so that the information is outputted,

said receiving means for outputting said information outputting at least a first image signal on which information is superimposed or overwritten by said information output circuit and a second image signal on which information is superimposed or overwritten by said information output circuit,

said recording means supplying at least said second image signal to said first change-over circuit.

29. An image recording apparatus according to Claim 27, wherein said information output circuit included in said receiving means for outputting information comprises a circuit supplied with an image signal for superimposing or overwriting an image signal for displaying information on said supplied image signal to be outputted, so that the information is outputted, and

said receiving means for outputting said information outputs at least a first image signal on which information is superimposed or overwritten by said information output circuit and a second image signal on which information is superimposed or overwritten by said information output circuit,

said recording means supplying at least said second image signal to said first change-over circuit.

30. An image recording apparatus according to Claim 9, wherein said receiving means for outputting information comprises

a digital broadcast receiving circuit for demodulating a digital broadcast signal and outputting a compressed digital image signal,

an expander circuit for expanding said compressed digital image signal to output a digital image signal, and

a digital-to-analog conversion circuit for converting said digital image signal into a first analog image signal, and

said information output circuit included in said receiving means for outputting said information comprises a circuit supplied with said digital image signal and for superimposing or overwriting a digital image signal for displaying information on said supplied digital image signal to be outputted, so that the information is outputted,

said information output circuit outputting at least said digital image signal which is not superimposed or overwritten and said first analog image signal,

said recording means comprising

a first change-over circuit for selecting one of a plurality of image signals to output a second analog image signal, and

a recording circuit for selecting one of a supplied digital image signal and an analog image signal to be recorded,

said recording means supplying at least said first analog image signal to said first change-over circuit,

said recording means supplying the digital image signal produced from said receiving means and said second analog image signal to said recording circuit,

said recording means supplying said first and second analog image signal to said second change-over circuit,

said recording means outputting said second analog image signal,

said first change-over circuit selecting said first analog image signal to be outputted when said information output circuit is displaying information,

said information output circuit does not display information when said recording circuit is recording an analog image signal.

31. An image recording apparatus according to Claim 9, wherein said receiving means for outputting information comprises

a digital broadcast receiving circuit for demodulating a digital broadcast signal and outputting a compressed digital image signal,

an expander circuit for expanding said compressed digital image signal to output a digital image

signal, and

a digital-to-analog conversion circuit for converting said digital image signal into a first analog image signal, and

said information output circuit included in said receiving means for outputting said information comprises a circuit supplied with said digital image signal and for superimposing or overwriting a digital image signal for displaying information on said supplied digital image signal to be outputted, so that the information is outputted,

said information output circuit outputting at least said digital image signal which is not superimposed or overwritten and said first analog image signal,

said recording means comprising

a first change-over circuit for selecting one of a plurality of image signals to output a second analog image signal, and

a recording circuit for selecting one of a supplied digital image signal and an analog image signal to be recorded,

said recording means supplying at least said first analog image signal to said first change-over circuit,

said recording means supplying the digital image signal produced from said receiving means and said second analog image signal to said recording circuit,

said recording means supplying said first and

second analog image signal to said second change-over circuit,

said recording means outputting said second analog image signal,

said second change-over circuit selecting said first analog image signal to be outputted when said information output circuit is displaying information,

said information output circuit does not display information when said recording circuit is recording an analog image signal and said first change-over circuit selects said first image signal to be outputted.

32. An image recording and reproducing apparatus including a rotary drum in which a magnetic head is mounted and a tape moving mechanism for winding a magnetic tape on the rotary drum to be moved and which selects a digital information signal and an analog image signal to record the signal on the magnetic tape and reproduce the recorded signals by the magnetic head, comprising

control means for controlling a rotation phase of said rotary drum and a movement phase of said magnetic tape,

first reference signal producing means for producing a first reference signal synchronized with a digital information signal being recorded or reproduced,

second reference signal producing means for producing a second reference signal synchronized with an

inputted analog image signal, and

information superimposition means for superimposing information on the inputted analog image signal to be outputted, and

said second reference signal producing means and said information superimposition means are supplied with the analog image signal being recorded or reproduced,

said control means selecting said first reference signal and said second reference signal and using the selected signal as a reference signal for phase control,

said information superimposition means using said second reference signal as a reference signal for superimposition of information.

33. An image recording and reproducing apparatus according to Claim 32, wherein the same reference signal is supplied to said control means and said information superimposition means and the reference signal supplied upon superimposition of information is changed over to said second reference signal.

34. An image recording and reproducing apparatus according to Claim 32, wherein said control means produces a third reference signal synchronized with said first reference signal and said third reference signal is used as a reference signal for phase control upon superimposition of information.

35. An image recording and reproducing apparatus

according to Claim 32, wherein said information superimposition means does not superimpose information when a digital information signal is recorded or reproduced.

36. An image recording and reproducing apparatus according to Claim 32, wherein said information superimposition means does not superimpose information when reproduction is started while a recording medium in which a digital information signal can be recorded is inserted in said recording and reproducing apparatus.

37. An image recording and reproducing apparatus according to Claim 32, wherein when a digital information signal is recorded or reproduced, an analog image signal which is a converted signal of the digital information signal being recorded or reproduced is supplied to said second reference signal producing means and said information superimposition means.

38. An image recording and reproducing apparatus according to Claim 32, comprising

change-over means for inputting an analog image signal being recorded or reproduced and analog image and audio signals different from said analog image signal being recorded or reproduced and selecting a signal to be outputted, and

third reference signal producing means for producing a third reference signal synchronized with the analog image signal outputted by said change-over means,

said information superimposition means being

supplied with the analog image signal outputted by said change-over means and using said third reference signal as a reference signal for superimposition of information.

39. An image recording and reproducing apparatus according to Claim 32, wherein said analog image signal different from said analog image signal being recorded or reproduced is a signal which is an analog image signal into which a signal obtained by demodulating a digital broadcast signal is converted.